

Joint Legislative Commission on Energy Policy

T. Graham Edwards, CEO ElectriCities of North Carolina, Inc. December 3, 2013





- History: Why ElectriCities Was Formed
- Governance
- Business
 - NCEMPA
 - NCMPA1





A Look Back at History

The Impact of the 1970s Energy Crisis: Poor Reliability, Rising Costs Created Dire Situation

- With energy demand outpacing supply, utilities couldn't guarantee reliable long-term power supply
 - Rationing of power predicted
 - Electric costs steadily increasing
- Cities feared negative impact on economic development





A Look Back at History

The Impact of the 1970s Energy Crisis: Poor Reliability

"For the first time in modern North Carolina, you're seeing the two largest power companies in the state not being able to say to an industrial prospect, 'Yes, come any time you want and anywhere you want, and we'll have power for you."

> Sherwood Smith, Chairman and CEO, CP&L October 1981 Business North Carolina





A Look Back at History

The Impact of the 1970s Energy Crisis: Rising Costs

- Wholesale rates were volatile and unpredictable
- Energy rates skyrocketed across the US
- CP&L wholesale rates increased 243% from 1970-'79 in eastern NC
- Duke wholesale rates increased 262% from 1970-'79 in western NC







Power Agencies are Formed

Energy Crisis Brought Together Utilities and Cities

- Cities wanted greater reliability and control over costs
- Utilities needed help to finance new power plants

The Best Solution at the Time: Cities Granted Permission to Own Generation

- Legislation passed unanimously in 1975
- Constitutional Amendment passed in 1977

Who Supported the Idea?

Governor, Legislators, City Officials, Voters





Three Mile Island Changed Everything

March 28, 1979

The Nuclear Accident

Radiation Continues To Leak From Crippled Plant

HARRISBURG, Pa. (AP) — Radiation leaks from the 'Three Mile Island nuclear power plant continued today, authorities said, as a debate grew over what was described as one of this most serious such incidents in this country's history.

"The vapor that is now going into the atmosphere is from a sump pump and is only mildly radioactive within accepted limits," said Don Curry, a spokesman for the Metropolitan Edison Co., owner of the plant. The pump is designed to remove water after it has cooled the reactor.

is designed to remove water after it has cooled the reactor.
"We concede that it's not just a little thing," Curry said. "In terms of publicity it will probably surpass the Browns Ferry incident."

Until now, a March 1975 fire in the control room of the Browns Ferry nuclear plant in Alabama has generally been considered this nation's most dangerous incident involving a nuclear reactor.

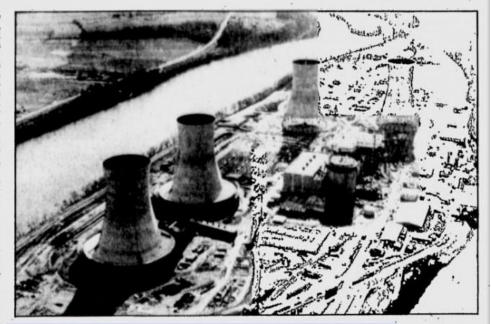
Low level radiation was detected in the air as far as 16 miles away after an apparent valve failure Wednesday morning resulted in excessive pressure being built up in the water used to cool the reactor core at Three Mile Island.

"Some of the water vapor, through the venting system, went into the atmosphere," Curry said.

Curry said the latest radiation measurements outside the plant were at two to three millirems. Individuals are exposed to up to 30-millirems in a single X-ray examination.

Walter Creitz, president of Metropolitan Edison, said on ABC-TV's Good Morning America show this morning that the plant shut down safely and that the level of radiation released "would not endanger or injure any people."

Creitz said his company did not know what equipment had been disabled or what precisely caused the accident.



An aerial view of the Three Mile Island nuclear power plant.

AP Photo



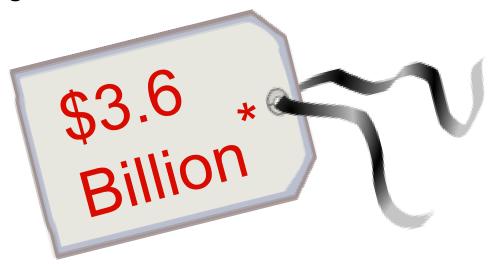


Three Mile Island Impact on NCEMPA

The Shearon Harris Nuclear Plant Faced:

- Increased government regulations
- Construction delays
- Significant cost overruns

Plans for three additional units at Shearon Harris were cancelled.



^{* \$3.6}B includes construction cost, fuel, interest during construction, deferred cost and cancellation cost. Original cost estimate: \$1.4B.

Sources: Research Triangle Institute "Policy Options for North Carolina's Municipal Power Agencies" (March 1999) and ElectriCities "Report to the Study Commission on the Future of Electric Service in North Carolina" (October 1999).





Three Mile Island Impact on NCMPA1

The Catawba Nuclear Plant Faced:

- Increased government regulations
- Construction delays
- Significant cost overruns

Cost of NCMPA1 Share of Catawba





^{*} Source: NCMPA1 "Summary of Events Affecting Current and Projected Power Costs and Responses Thereto" (July 5, 1988); original cost projected to be \$0.5 billion.

- History
- Governance: How ElectriCities Operates
- Business
 - NCEMPA
 - NCMPA 1





Governance Structure

NCMPA1 Board of Commissioners

Primary Responsibilities

- Accepts/rejects wholesale rates
- Adopts NCMPA1 budgets
- Concurrence with debt issuance





Trade Organization

Government Relations Member Services Safety & Training Economic Development

ElectriCities Board of Directors

Primary Responsibilities

- Sets policy and strategic direction
- Holds management accountable for day-to-day operations of the Power Agencies
- Reviews and approves ElectriCities budget
- Adopts wholesale rates sufficient to cover Power Agencies' debt and expenses subject to rejection by the Board of Commissioners

NCEMPA Board of Commissioners

Primary Responsibilities

- Accepts/rejects wholesale rates
- Adopts NCEMPA budgets
- Concurrence with debt issuance



ElectriCities Staff

Primary Responsibilities

- Provides management services to the Power Agencies
- Provides other joint municipal assistance services to 87 cities in NC, SC and VA





Governance Structure - Electric Rates

Power Agencies provide wholesale power

- Power Agencies are the wholesale power supplier to their member cities
- Wholesale rates are required by law to be sufficient to pay the bonds used to finance the projects
- Wholesale rates are proposed by Rate Committees, approved by the Board of Directors, Board of Commissioners for each agency can accept or reject
- Cities determine retail rates for their customers taking into account wholesale costs and distribution expenses





Governance Structure

Additional Oversight of Power Agencies

- NCUC Agencies must file Renewable Energy and Energy Efficiency Portfolio Standard (REPS) compliance reports and plans annually and file for approval of territorial agreements between electrical suppliers
- Local Government Commission must approval all debt issuances
- Required to publish notice of proposed rate increases once a week for two successive weeks in newspapers of general circulation in cities
- Annual audits by independent, outside auditors







North Carolina Eastern Municipal Power Agency





NCEMPA Jointly Owned Units

Harris Plant 16.17% Ownership (150.0 MW) License Expires: 10/24/2046





Brunswick Plant 18.33% Ownership (342.7 MW) U1 License Expires: 9/8/2036 U2 License Expires: 12/27/2034

Mayo Plant 16.17% Ownership (117.6 MW)





Roxboro Unit 4 12.94% Ownership (90.3 MW)





NCEMPA Board of Commissioners

Appointed by Local Governing Board

NCEMPA Officers

Mayor Vivian A. Jones

Chair, Wake Forest

Matthew R. Zapp

Vice Chair, Benson

Donald I. Evans

Secretary-Treasurer, Wilson

Apex

Bruce A. Radford J. Michael Wilson R. Lee Smiley

Ayden

Adam G. Mitchell Mayor Stephen W. Tripp

Belhaven

Mayor Adam W. O'Neal Dr. Guinn Leverett

Benson

Matthew R. Zapp

Braston A. Newton

Clayton

Robert J. Ahlert
Mayor Jody L. McLeod

Edenton

Anne-Marie Knighton

Willis Privott Glenn Andersen

Elizabeth City

Richard Olson

Mayor Joseph Peel

Farmville

Richard N. Hicks David P. Hodgkins Brian Shackleford

Fremont

Leon V. Mooring Harold Cuddington

Greenville Utilities Comm.

Virginia D. Hardy, PhD John F. Minges, III

Anthony C. (Tony) Cannon

Hamilton

Herbert L. Everett

Mayor Donald G. Matthews, III

Hertford

Brandon Shoaf

Mayor Horace C. Reid, Jr.

Hobgood

Vacant

Danny Ellis

Hookerton

Mayor Robert E. Taylor

April H. Baker Danny Taylor Kinston

Vacant Tony Sears

Rhonda F. Barwick

La Grange

John P. Craft Larry Gladney Bobby Wooten

Laurinburg

Charles D. Nichols III

Curtis B. Leak

Louisburg

Ray Patterson Tony L. King

Mark R. Warren

Lumberton

Harry L. Ivey Leon Maynor

T. Wayne Horne

New Bern

Jonathan Rynne
Vacant

Vacant

Pikeville

Lyman G. Galloway Robert Hooks

Red Springs

Mayor John M. McNeill

David Shook

Edward Henderson

Robersonville

Elizabeth W. Jenkins

Stacy Scott

John David Jenkins

Rocky Mount

Andre D. Knight

Charles W. Penny

Richard H. Worsinger

Scotland Neck

Mayor Leonard Bunting

Nancy Jackson

Selma

Vacant

Donald Baker

Mayor Cheryl L. Oliver

Smithfield

Paul Sabiston

Vacant

Southport

Paul D. Fisher

James F. Powell III

Tarboro

Rick Page

Alan Thornton

Robert L. (Buddy) Harrison

Wake Forest

Mayor Vivian A. Jones

Mark S. Williams

Washington

Doug Mercer

Keith Hardt Brian Alligood

Wilson

Donald I. Evans

Dathan C. Shows Grant W. Goings

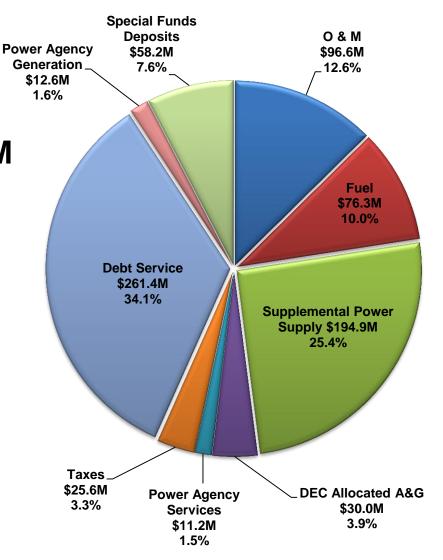




NCEMPA 2013 Budget - Expenses



(all dollars in millions)

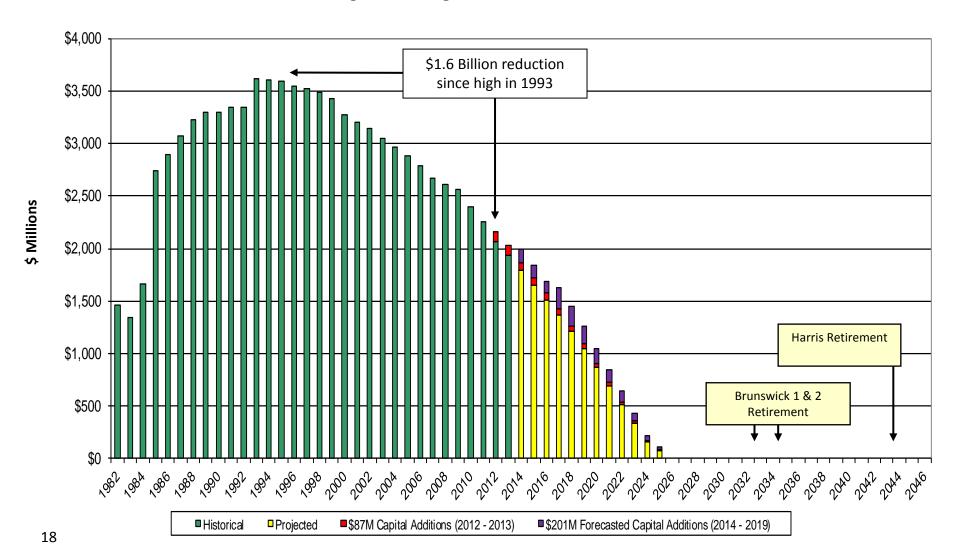






NCEMPA – Outstanding Debt

Outstanding Debt January 2013 = \$2,025,720,000 Weighted Average Interest Cost = 5.24%





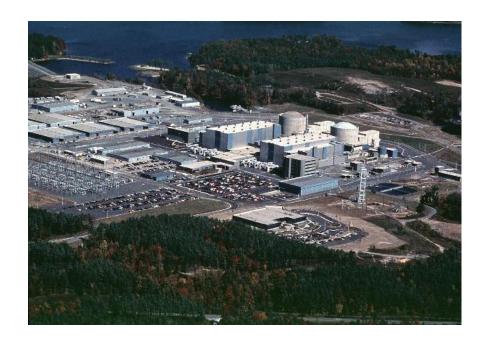


North Carolina Municipal Power Agency 1





Catawba Nuclear Station



Nuclear Regulatory Commission issued license extensions December 5, 2003 for both Catawba and McGuire Nuclear Plants

License Expiration

Catawba 1	12/5/43
Catawba 2	12/5/43
McGuire 1	6/12/41
McGuire 2	3/3/43

- The Catawba plant, which consists of two identical units, is jointly owned by NCMPA1, Duke, Piedmont Municipal Power Agency (S.C.) and North Carolina Electric Membership Corporation
- NCMPA1 owns 75% of Catawba Unit 2
- Through contractual arrangements, the owners share both units at the plant
- NCMPA1 owns the largest share of the Catawba Plant

_	NCMPA1	37.500%
_	NCEMC	30.754%
_	Duke	19.246%
_	PMPA	12.500%





NCMPA1 Board of Commissioners

Appointed by Local Governing Board

NCMPA1 Officers

Jack F. Neel

Chairman, Albemarle

Albemarle

Raymond I. Allen

Jack F. Neel

Bostic

Vacant Vacant

Cherryville

Mayor Bob Austell

Brian Dalton

Cornelius

Chuck Travis

David Gilroy

Drexel

Sherri Bradshaw

Carroll Franklin

Gastonia

Porter L. McAteer

Jim Gallagher

Paul Jakubczak

Granite Falls

Mayor Barry C. Hayes

Jerry T. Church Frank Mackie

Mayor Barry C. Hayes

Vice Chairman, Granite Falls

High Point

Strib Boynton

Mayor Bernita Sims

J. William McGuinn, Jr.

Huntersville

Gregory H. Ferguson

Sarah McAulay

Landis

W. Steve Rowland

D. Reed Linn

Lexington

John T. Walser, Jr.

Mayor Newell Clark

L. Wayne Alley

Lincolnton

Stephen H. Peeler

Mayor John O. Gilleland, Jr.

Jeff B. Emory

Maiden

Billy R. Price

Marcus C. Midgett

Mayor Constantine H. Kutteh

Secretary-Treasurer, Statesville

Monroe

Donald D. Mitchell

John O. D'Agostino

Freddie B. Gordon

Morganton

Dan Brown

Brooks Kirby

Sally W. Sandy

Newton

Todd Clark

Wayne Dellinger

Douglas S. Wesson

Pineville

Mayor George Fowler

Vacant

Shelby

Mayor O. Stanhope Anthony, III

J. Richard Howell, Jr.

Brad R. Cornwell

Statesville

Mayor Constantine H. Kutteh

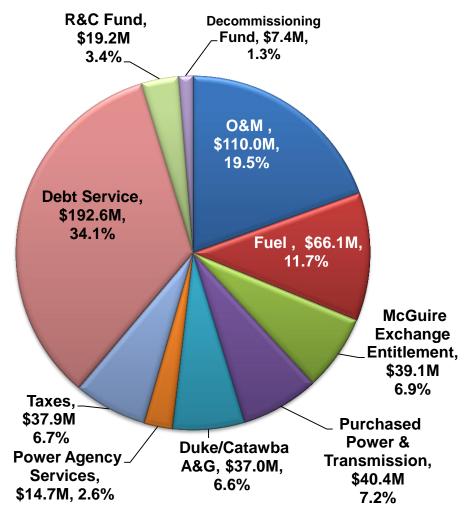
F. Kent Houpe

Larry Pressley



NCMPA1 – 2013 Budget Expenses

2013 Budget \$564M

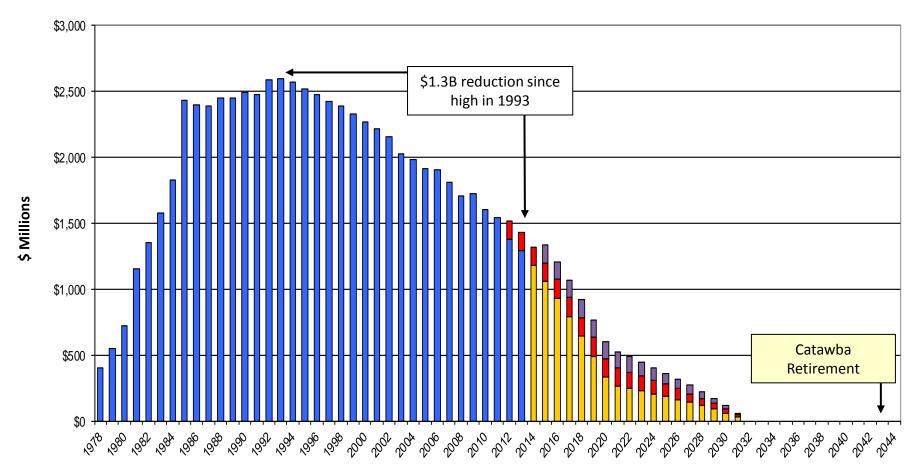






Outstanding Principal by Year Historical and Projected

Outstanding Debt January 2013 = \$1,433,090,000 Weighted Average Interest Cost = 3.36%







The Value of ElectriCities

Our Purpose:

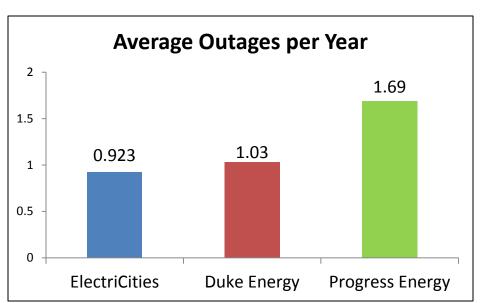
 Delivering value to public power communities through collective strength, wisdom and action while promoting a more successful future for our citizens

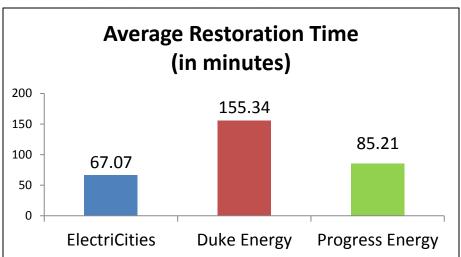




NC Public Power Reliability

- Industry data shows that ElectriCities communities provide more reliable power and restore power more quickly than investor-owned utilities
- Economist estimates the value of this increased reliability to the customers is between \$25-\$30 million per year











Contact Information

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